ATTACHMENT A
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A method for synthesis of a substrate-selective membrane comprising: (a) polymerising a mixture comprising a template, at least one functional monomer, cross-linker, plasticiser and pore-forming component; and (b) extracting the template and porogen to form a flexible and porous polymeric membrane.

2. (Original) A method according to claim 1 wherein conditions are selected so that the membrane contains small (< 100 nm in diameter) and large (> 500 nm in diameter) pores.

3. (Currently Amended) The method of claim 1 ~~or claim 2~~ wherein conditions are selected so that the film has a porosity of from about 25 to 90%.

4. (Currently Amended) The method of ~~any preceding~~ claim 1 wherein the monomers and/or cross-linker comprise one or more of vinyl, allyl, styrene, acrylic and methacrylic derivatives, and mixtures thereof.

5. (Currently Amended) The method of ~~any preceding~~ claim 1 wherein the plasticiser is selected from oligourethane acrylate, butadiene rubber, polyurethane, and caoutchoucs.

6. (Currently Amended) The method of ~~any preceding~~ claim 1 wherein the pore-forming component is selected from aliphatic hydrocarbons, aromatic hydrocarbons, esters, alcohols, ketones, ethers, solutions of soluble polymers, and mixtures thereof.

7. (Original) The method of claim 6 wherein the pore-forming component comprises one or more of; (a) soluble polymers selected from non cross-linked polymers or copolymers of monomers selected from styrene, ring-substituted styrene, acrylates,

methacrylates, dienes, vinylchloride, vinylacetate, polyvinyl chloride, and polyethylene glycol; (b) glycerol; (c) cyclohexanol, and (d) mineral oil.

8. (Currently Amended) The method of ~~any of claims 1-5~~claim 1 wherein the pore-forming component comprises insoluble macroporous polymer particles.

9. (Original) The method of claim 8 wherein said particles are cross-linked copolymers of monomers selected from vinyl, allyl, styrene, acrylic and methacrylic derivatives.

10. (Currently Amended) The method of claim 8 ~~or claim 9~~ wherein said particles have diameters in the range 1-1000 μm.

11. (Currently Amended) The method of ~~any of claims 1-5~~claim 1 wherein the pore-forming component is an inorganic porogen.

12. (Original) The method of claim 11 wherein the porogen comprises $MgCl_2$, $Mg(Cl0_4)_2$, $ZnCl_2$, Ca Cl_2, SiO_2, $NaNO_3$, $NaOCOCH_3$ and/or NaCl.

13. (Currently Amended) The method of ~~any preceding~~ claim 1 including a further step of using the membrane as a separation matrix.

14. (Original) The method of claim 12 wherein said separation matrix is used for membrane chromatography, or for a catalytic, diagnostic, or absorption process.

15. (Currently Amended) A substrate-selective membrane as produced by the method of ~~any of claims 1-11~~claim 1.

16. (Cancelled).

17. (New) A separation matrix comprising the substrate-selective membrane of claim 15.